

Center for Urban Horticulture University of Washington Vol. 2, No. 4

INTERIORSCAPE FORUM: The Role of Preserved Plants in Commercial Interiorscapes

Date Time Location Speaker Tuesday, December 6
7 to 8:30 p.m.
Center for Urban Horticulture
Marilyn Giltner

Preserved plants have created quite a stir. Some see them as a threat to the interiorscape maintenance industry. Others see them as a useful, new interior design material. In what situations are preserved plants most approriate? How can they be integrated with live plants? What are the advantages and disadvantages of preserved plants? Bring all your questions and concerns about preserved plants to this forum. Refreshments will be served.

Marilyn Giltner has worked in the local interiorscape industry for several years. She is currently district manager for commercial sales with Weyerhaeuser Specialty Plants.

Registration Form: Interiorscape Forum

New Methods for Controlling Fungus Gnats on Interior Plants

William Olkowski of the Bio Integral Resource Center reports that new approaches to controlling fungus gnats on indoor plants are being tested. These are thought to be less toxic than conventional pesticides.

1. Bacillus thuringiensis var. israelensis (BTI) has been used to control fungus gnats on mushroom culture and recent information suggests that it may be effective in containers of ornamental plants as well. This bacterial insecticide is highly selective and considered harmless to humans. 2. Methoprene is an insect growth regulator. It is currently available from Zoecon Corp. and is labeled for fungus gnat control in mushroom culture. Methoprene is regarded as non-toxic to humans and other mammals.

3. Nematodes (Neoplectanid or Steinernematid nematodes) are reportedly effective against fungus gnats. They can remain active in the soil mix for up to 90 days.

4. Predatory mites (*Geolaelaps* sp.) can provide good control of fungus gnats, according to observations in British Columbia greenhouses. The mite is now being tested, and Applied Bionomics of Canada has plans to produce it for sale. 5. Trap-cropping can be used to reduce fungus gnat populations with small collections of houseplants. With this approach, a crop that is especially attractive to the pest is grown near the main crop. The pests are drawn to the trap crop, and it is then destroyed. Fungus gnats are known to be attracted to sprouted grain, according to an extension pamphlet written by Dr. Art Antonelli of Washington State University.

For more information on this subject, read the article "Controlling Fungus Gnats on Plants Indoors," which appeared in the summer 1988 issue of *Common Sense Pest Control Quarterly*. This journal is available for reference in the Miller Library at the Center for Urban Horticulture.

Cooperative Extension Washington State University

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INTERIOR HORT Editorial Staff: Dr. John A. Wott George J. Pinyuh Van M. Bobbitt, editor

The Effect of Light Source on Maintenance of Interior Plants

Light intensity is more important than the light quality in maintaining healthy plants in interiorscapes, according to researchers at Texas A&M University. They subjected Ficus benjamina, Ficus stricta, Dieffenbachia amoena, and Brassaia arboricola to the following light regimes: (1) 100% PAR (photosynthetically active radiation) from regular fluorescent lamps, (2) 70% PAR from fluorescent plus 30% PAR from incandescent, and (3) 50% PAR from Gro-Lux and 50% from Gro-Lux Wide Spectrum fluorescent.

Gro-Lux lamps and supplemental incandescent light are suppose to enhance plant growth because they provide red light in addition to the primarly blue light of standard fluorescent lamps. The results of this experiment do not bear this out, though. The three light sources had no significant effect on plant height, plant quality, and leaf chlorophyll content. This suggests that standard fluorescent lamps, with their efficiency, long life, and lower cost, are often the best choice for interior lighting of foliage plants.

Reference

Turner, Melanie A., David L. Morgan, and David Wm. Reed. 1987. The effect of light quality and fertility on long term interior maintenance of selected foliage plants. Journal of Environmental Horticulture 5:76-79.

New Dieffenbachia Cultivars

Dieffenbachia was included in a foliage plant breeding program at the Central Florida Research and Education Center, University of Florida. This project resulted in two new cultivars of Dieffenbachia: 'Triumph' and 'Victory'.

'Triumph' has a compact growth habit, and its leaves are variegated. Its multicolored petioles consist of two russet-colored outer bands that blend into pink inner bands that surround a white inner core.

'Victory' is a fairly large *Dieffenbachia*, though it has a compact appearance. Its foliage is brightly variegated and accented by a white midrib.

These cultivars of *Dieffenbachia* have been trademarked by the Florida Foundation Seed Producers and released to tissue culture labs for propagation and distribution. For more information on availability, write to the Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443.

Tomato Spotted Wilt Virus of Aphelandra

Tomato spotted wilt virus (TSWV) diseases are becoming more of a problem in greenhouse crops, according to plant pathologists Robert S. Halliwell and Larry W. Barnes of Texas A & M University. They recently found that the zebra plant (*Aphelandra squarrosa*) is also susceptible to TSMV. Symptoms on *Aphelandra* include: (1) light brown necrosis of the major veins of semimature terminal leaves; (2) a progression of the discoloration to include interveinal areas of the leaves; (3) leaf distortion; (4) a downward bending of the leaves; and (5) premature leaf drop.

In Aphelandra, the virus appears to only move upward in the stem. Halliwell and Barnes found that buds taken below the symptomatic leaves were free of the virus, while buds taken above those leaves were always infectious.

Horticulturists should be aware of TSWV because it infects a large number of greenhouse and nursery crops, including amaryllis, begonia, calceolaria, calendula, calla lily, chrysanthemum, fuchsia, geranium, gloxinia, petunia, primrose, salvia, stock, and zinnia. *Westcott's Plant Disease Handbook* states that TSWV is most serious on the West Coast, primarily in greenhouses but sometimes outdoors.

TSWV is naturally transmitted by thrips. Only larvae can acquire the virus by feeding on infected plants. The virus then goes through a 5–9 day incubation period. Simultaneously, the thrip transforms from a larva into an adult, which is capable of transmitting TSWV to healthy plants.

The spread of TSWV can be minimized by the following measures: (1) reducing thrip populations; (2) destroying symptomatic plants; and (3) using virus-free plant material for propagation.

References

Halliwell, R. S, and L. W. Barnes. 1987. Tomato spotted wilt virus infection of commercial *Aphelandra* sp. Journal of Environmental Horticulture 5:120–121.

Horst, R. K. 1979. Westcott's Plant Disease Handbook. New York: Van Nostrand Reinhold Co.

Pirone, P. P. 1970. Diseases and Pests of Ornamental Plants. New York: The Ronald Press.

BOOK REVIEW

Interior Plantscapes: Installation, Maintenance, and Management, George H. Manaker, 1987. Prentice-Hall, Inc. 324 pp. inc. index, \$29.95 hardbound.

Interior Plantscapes is written as a textbook for the interiorscape student and also as a reference book for the professional interiorscaper. As in the previous 1st edition, the 324 page 2nd edition covers thirteen major topics pertaining to foliage plants. A few examples are water, light, and nutrition. The topics are the same as in the 1st edition, but several have been revised and updated or have been expanded to include more information on such topics as self-watering containers, tissue testing, and flowering plants. Each chapter contains a brief summary as well as an extensive bibliography for further reference.

Also included in the book is an appendix in which there are two handy references. The first of which is an alphabetical listing of names and addresses of sources of decorative planters. The second reference is a listing of leaf and stem diseases which attack foliage plants. This list is organized by genera with the disease and description listed below. This list provides a quick reference for foliage plant disease identification.

Throughout the text are 188 black and white photographs of interior plants, pests, and equipment. There are also 39 quickreference tables which could be helpful to the professional interiorscaper. A few examples of these are the listing of plants susceptible to fluoride, temperature ranges for green plants, and the listing of recommended plants for interior plantscaping.

George Manaker, a professor from Temple University, originally wrote Interior Plantscapes because he could not find a textbook to be used in his indoor foliage plant course. With the 2nd edition, Manaker makes the needed revisions to keep this well-written book up-to-date and useful to the interiorscape student. The format of the book enables the user to quickly locate information desired. Overall, I feel Interior Plantscapes is an excellent reference book for both the interiorscape student and the established professional interiorscaper.

Interior Plantscapes Installation, Maintenance, and Management is in the Miller Library, Center for Urban Horticulture. It can be ordered through your local bookstore or by writing directly to the publisher at this address: Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632.

Suzanne Pesl, summer intern, Center for Urban Horticulture